

IN THE CLAIMS:

1-12. (Canceled)

13. (Original) A gap adjustment apparatus comprising:

*AI
cont'd*
a first holder for holding a first object having a first measurement surface;
a second holder for holding a second object having a second measurement surface, in a manner such that the second measurement surface faces the first measurement surface;

sensor is place 38 (1)
a first displacement gauge for measuring a distance extending from the first displacement gauge to the first measurement surface;

yo
a target whose relative position with respect to the first displacement gauge is fixed, the target having a target measurement surface orientated in the same direction as the second measurement surface;

a second displacement gauge for measuring distances extending from the second displacement gauge to the second measurement surface and to the target measurement surface; and

a moving mechanism for moving at least one of the first holder and the second holder, in order to alter a gap between the first measurement surface and the second measurement surface.

14. (Original) A gap adjustment apparatus according to claim 13, wherein the first displacement gauge is disposed on the outside of a displacement amount detectable range of the second displacement gauge, the second displacement gauge is disposed on the outside of a displacement amount detectable range of the first displacement gauge.

15. (Original) A gap adjustment apparatus according to claim 13, wherein the first displacement gauge and the second displacement gauge are all electrostatic capacity type displacement gauges.

16. (Original) A gap adjustment apparatus according to claim 13, further comprising a controller capable of driving the moving mechanism in accordance with a calculation result calculated by using an equation $D_A + D_D - (D_B + D_C)$ in which D_A is a distance extending from the second displacement gauge to the second measurement surface, D_B is a distance extending from the second displacement gauge to the target measurement surface, D_C is a distance extending from the first displacement gauge to the target measurement surface, D_D is a distance extending from the first displacement gauge to the first measurement surface.

17. (Original) A gap adjustment apparatus according to claim 13, wherein one of the first object and the second object is a mask for use in the electron beam proximity exposure, the other of the first object and the second object is a wafer to be subjected to the exposure treatment, the apparatus further comprising:

an electron gun for emitting an electron beam; and
an electron beam controller for controlling the electron beam, in a manner such that the electron beam emitted from the electron gun is enabled to pass through the mask so as to irradiate the wafer.

18-24. (Cancelled)